

Title (en)

GAMMA RAY DETECTOR WITH INTERACTION DEPTH CODING

Title (de)

GAMMASTRAHLENDETEKTOR MIT INTERAKTIONSTIEFENCODIERUNG

Title (fr)

DETECTEUR DE RAYONS GAMMA PERMETTANT DE CALCULER LA PROFONDEUR D'INTERACTION

Publication

EP 1617237 A1 20060118 (EN)

Application

EP 04726188 A 20040407

Priority

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- ES 200300861 A 20030410

Abstract (en)

Gamma ray detector characterised in that its structural elements are a continuous scintillator crystal, a position sensitive photodetector and associated electronics intended to calculate, in addition to the gamma ray energy in the position of its interaction in the crystal, the interaction depth in the crystal from the standard deviation of the scintillation light distribution. Said information may be obtained electronically, in analog form and therefore instantaneous, from the first three moments of the scintillation light distribution. A method for implementing said electronics by way of a network of resistances characterised for analog and simultaneous computation of the first and second distribution moments is also disclosed.

IPC 1-7

G01T 1/202; **G01T 1/164**

IPC 8 full level

G01T 1/164 (2006.01); **G01T 1/202** (2006.01)

CPC (source: EP US)

G01T 1/1642 (2013.01 - EP US); **G01T 1/1644** (2013.01 - EP US)

Citation (search report)

See references of WO 2004090572A1

Citation (examination)

US 4675526 A 19870623 - ROGERS JOEL G [CA], et al

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CN102395901A; ES2363286A1; US11022703B2; WO2013166574A1; US8378307B2; WO2021140233A2; EP2746816A1; US9915739B2; WO2010119358A3; WO2021140233A3; EP2748635A2; JP2017537471A; WO2011051529A3

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